

REMARKS

Reconsideration and withdrawal of the rejections of this application and consideration and entry of this paper are respectfully requested in view of the herein remarks and accompanying information, which place the application in condition for allowance.

I.) Status of Claims and Formal Matters

Claims 50-55, 58-64, and 67 were pending in this application. Claims 53 and 59-66 were canceled. Claims 56-57 were withdrawn by the Examiner as being dependent on a canceled claim. Claims 56-57 have now been amended to depend from claim 67. The Examiner has asked to clarify the record with regard to the "not entered" claims. The correct status identifiers have now been used to identify these claims.

Independent claim 67 has been amended. The claim amendment is supported on page 5, lines 17-22, of the specification as originally filed. The amendment is further supported in the embodiments shown as composition D, E, F, and H in the examples (see figures 6-8 and 10).

It is submitted that the claims, herewith and as originally presented, are patentably distinct over the prior art cited by the Examiner, and that these claims were in full compliance with the requirements of 35 U.S.C. § 112. The amendments of the claims, as presented herein, are not made for purposes of patentability within the meaning of 35 U.S.C. §§§§ 101, 102, 103 or 112. Rather, these amendments and additions are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

II.) Claim Objections

Claims 50-55 and 58-64 were objected to as being of improper dependent form for failing to further limit the subject matter of the previous claim.

Claims 53 and 59-64 have been canceled. With respect to the remaining claims objected to, Applicants fail to understand the Examiner's position. Applicants submit that these claims do further limit independent claim 67, from which they depend. The Examiner is asked to clarify her position in regard to these dependent claims.

III.) The Rejections Under 35 U.S.C. 103(a) are Overcome

A.) Rejections over Miyoshi et al (U.S. Patent No. 5,968,531)

Claims 53, 56, and 67 were rejected under 35 U.S.C. 103(a) as being unpatentable over Miyoshi. As claims 53 and 62 have been canceled, the subsequent discussion will focus on amended claim 67 only.

The Office Action contends that Miyoshi teaches core particles, such as mica, surrounded by fine particles of metal oxide, including titanium dioxide. The Office Action further alleges that claim 67 “differs from the reference compound only in the specific thickness of the coating agent.” As a result, the Office Action concludes that it would be obvious to “optimize the thickness” of the coating agent being that “the artisan would be motivated to determine optimum amounts to get the maximum effect of the active compounds.”

To establish a *prima facie* case of obviousness of a claimed invention, all the claim limitations must be taught or suggested in the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Furthermore, there must be some suggestion or motivation to modify the reference.

Miyoshi does not teach or suggest several elements of amended claim 67. Miyoshi does not disclose a composition in the form of an oil, cream, lotion or paste. Rather, Miyoshi discloses a composite powder formulation. Moreover, Miyoshi does not disclose a mica core coated with at least one metal oxide layer consisting of Fe_2O_3 or a combination of Fe_2O_3 and TiO_2 . Finally, Miyoshi does not teach or suggest the metal oxide coating having a thickness between 40-80 nm. Thus, several of the claim limitations are not taught or suggested by Miyoshi and a *prima facie* case of obviousness has not been established.

The present invention is a cosmetic and/or therapeutic composition in the form of an oil, cream, lotion or paste. An advantage obtained by the composition according to the present invention is that extremely low transmittance values (see Fig. 1 of the present application) are obtained over the whole UV-spectra, even in the area of 360-400 nm where the prior art gives poor protection (p. 3, l. 4-7, 16-19 of the present application). Recent research has shown that it is equally important to protect the skin from radiation of this wavelength. This advantage fulfilled by the present invention is shown by transmittance values of less than about 26% for the compositions disclosed (see Fig. 6-8 and 10 of the present application) compared with

approximately 45% for the compositions described in Miyoshi (Fig. 3 in Miyoshi) for wavelengths in the 400 nm region.

In developing a formulation having a very high efficacy against UV radiation in the 400 nm range, one of ordinary skill in the art certainly would not look to Miyoshi. Unlike the presently claimed formulation, Miyoshi is directed to a formulation in the form of a powder. Also, the chemical composition and thickness of the coating in the claimed invention, which are neither taught nor suggested by Miyoshi, are likely responsible for its ability to block UV radiation in the desired regions. Thus, Applicants disagree with the Examiner's contention that the claimed invention is a mere optimization of that disclosed in Miyoshi. In fact, the claimed composition is inherently different from that disclosed in Miyoshi.

Thus, it is respectfully requested that the section 103 rejection over Miyoshi be removed.

B.) Rejections over Ogawa et al. (EP 0 998 901 A1)

Claims 50-51, 53-55, 58-60, 62-64 and 67 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. The Office Action alleges that Ogawa differs from the instant claims only in the specific thickness of the coating agent. Moreover, the Office Action contends that one of ordinary skill in the art would be motivated to optimize the thickness of the coating layer in order to "provide a composition with desired UV protection sought."

Applicants point out that Ogawa does not disclose using Fe_2O_3 as a coating material for the mica particles. Moreover, Ogawa does not disclose mica cores coated with at least one metal oxide chosen from the group consisting of Fe_2O_3 and a mixture of Fe_2O_3 and TiO_2 . Finally, as the Examiner stated, Ogawa does not disclose a thickness of metal oxide layer of 40-80 nm. Thus, at least three elements of independent claim 67 are not taught or suggested by Ogawa.

It is noted that Ogawa is not concerned with a composition of blocking UV radiation. Ogawa does not teach or suggest a composition that can block the penetration of UV radiation in the 300-400 nm range. Instead, Ogawa is directed to a make-up composition that changes its color upon UV-exposure. The purpose of the metal oxide layer is to control the interference color produced by the formulation. Varying the thickness of titanium dioxide on the coated mica will lead to a change in the interference color (see paragraphs [0056]-[0066] in Ogawa).

Thus, there is no suggestion or motivation in the reference to modify the cosmetic formulation to produce the UV-protecting composition of the present invention. The Examiner's

contention that optimizing the composition described in Ogawa "to provide a composition with the desired UV protection sought" is not within the scope of the reference. Moreover, there is no indication that modifying the reference as the examiner suggests would improve the composition for its intended purpose, a makeup cosmetic preparation having natural-color rendering properties. In fact, adding a 40-80 nm of Fe_2O_3 or $\text{Fe}_2\text{O}_3/\text{TiO}_2$ may very well render the composition ineffective for its intended purpose.

Thus, it is respectfully requested that the section 103 rejection over Ogawa be removed.

C.) Rejections over Ogawa et al. (EP 0 998 901 A1) in view of Pfenniger et al (U.S. Patent No. 5,025,041)

Claims 52 and 61 were rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. in view of Pfenniger et al. Claim 52 has been canceled but the Fe_2O_3 limitation has been incorporated into claim 67 and several of the dependent claims stemming from claim 67.

The Office Action contends that Ogawa, discussed above, which does not disclose iron oxide as a coating agent, can be combined with Pfenniger to render the presently presented claims obvious. Pfenniger allegedly discloses iron oxide coated mica particles which are optically pearlescent.

In order to establish a prima facie case of obviousness, the combination of references must teach or suggest all of the claim limitations. Neither Ogawa nor Pfenniger teaches "a cosmetic and/or therapeutic composition for topical use." Moreover, neither of the references discloses a metal oxide layer of 40-80 nm. Thus, a prima facie case of obviousness has not been established against the pending claims, as amended.

Ogawa, discussed in detail in the preceding section, is directed to a make-up composition. Like Ogawa, Pfenniger is not directed to a composition designed to protect the skin against UV radiation. Instead, Pfenniger is directed to two coat paint systems important in the coatings industry, mainly in automotive paint applications. There is no motivation found in either reference to combine the teachings of the two references. One of ordinary skill in the art certainly would not look to combine a composition designed to be applied as makeup with a composition designed be applied to an automobile as a coating. Furthermore, both Ogawa and Pfenniger are concerned with appearance of skin or a surface upon exposure to UV light. The

references are not concerned with protecting the skin from penetration of UV radiation, particularly in the 300-400 nm range.

It is also respectfully pointed out that Pfenniger belongs to a different technical field than that of the current invention. The Examiner is reminded that “in order to rely on a reference as a basis for rejection of an applicant’s invention, the reference must be in the field of the applicant’s endeavor or, if not, be reasonably pertinent to the particular problem with which the inventor was concerned.” In re Oetiker, 977 F.2d 1443, 1446, 24, USPQ2d 1443, 1445 (Fed. Cir. 1992). A reference concerned with automotive coatings certainly could not be considered analogous art for the purposes of analyzing obviousness. A person of ordinary skill in the art would have no incentive to look to Pfenniger for a solution to the problem of generating a therapeutic compositions which protects skin against UV rays in the 300-400 nm range.

Thus, it is respectfully requested that the section 103 rejection over Ogawa in view of Pfenniger be removed.

CONCLUSION

In view of the remarks, the application is believed to be in condition for allowance. Favorable reconsideration of the application and prompt issuance of a Notice of Allowance are earnestly solicited. The undersigned looks forward to hearing favorably from the Examiner at an early date, and, the Examiner is invited to telephonically contact the undersigned to advance prosecution.

We are attaching a substitute Declaration as the applicant has legally changed his name from "Rein Tammik" to --Eric Anderson-- and have also attached a copy of the Extract of Population Register issued by the Swedish Tax Agency which records the change of name.

Respectfully submitted,
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